

In the Claims

---

1-22. (Cancelled)

23. (currently amended) A receiver arrangement for a wireless terminal, for receiving a broadband signal the arrangement comprising:

a plurality of antennas forming a diversity antenna arrangement;

a plurality of receive paths, each receive path associated with one of said antennas;

a delay element in at least one of said receive paths;

a plurality of switches, each switch associated with one of said receive paths;

a combiner, arranged to combine the output of said plurality of switches into a combined signal;

a signal assessor, arranged to assess said combined signal according to a predetermined metric; and

a controller, arranged to selectively switch at least one antenna into its receive path and to determine dependent on said assessment whether to change said signal-antenna selection or to maintain said signal-antenna selection for a predetermined period.

24. (previously presented) A receiver arrangement as claimed in claim 23, wherein said predetermined metric is a received signal quality metric.

25. (previously presented) A receiver arrangement as claimed in claim 23, wherein each of the receive paths except for one is provided with a delay element arranged to time delay signals received by the antenna associated with said receive path.

26. (previously presented) A receiver arrangement as claimed in claim 23, wherein the controller switches signals into the receive path and signals currently in the receive path out of the receive path.

27. (Cancelled)

28. (previously presented) A receiver arrangement as claimed in claim 23, wherein the receiver arrangement uses a code division multiple access technique.

29. (previously presented) A receiver arrangement according to claim 23 wherein the signal assessor is arranged to assess the carrier to noise power ratio of received signals.

30. (previously presented) A receiver arrangement according to claim 23 wherein the plurality of antennas are separated by distance, whereby spatial diversity is employed to differentiate signals.

DI 31. (previously presented) A receiver arrangement according to claim 23 wherein the plurality of antennas have a different polarization, whereby polarization diversity is employed to differentiate signals.

32. (previously presented) A receiver arrangement according to claim 23 wherein the plurality of antennas support both spatial and polarization diversity.

33. (previously presented) A receiver arrangement according to claim 23, wherein hysteresis is employed to control the switching.

34. (previously presented) A receiver arrangement according to claim 23, further comprising a rake receiver arranged to combine signals.

35. (previously presented) A receiver arrangement according to claim 25, wherein each delay element is operable to delay the signals with respect to each other by a period  $\tau$ , corresponding to the chip rate of a spread spectrum transmission scheme in accordance with which said signals are provided.

36. (previously presented) A receiver arrangement according to claim 35 wherein MLSE demodulation techniques are employed.

37. (previously presented) A receiver arrangement according to claim 23, wherein the predetermined metric comprises a multi-path metric which can be set so that only one of said plurality of antenna is employed.

38. (Cancelled)

39. (currently amended) A method of operating a receiver arrangement in a wireless terminal comprising a plurality of antennas forming a diversity antenna arrangement, the method comprising:

DI receiving broadband signals along at least one of a plurality of receive paths, each receive path associated with an antenna and each having a switch and at least one of said receive paths having a delay element;

selecting at least one received signals using said switches;

combining the outputs of said switches into a combined signal;

assessing said combined signal according to a predetermined metric; and

dependent on said assessment, deciding whether to change said signal selection or to maintain said signal selection for a predetermined period.

40. (previously presented) A method as claimed in claim 39, wherein the selecting step switches signals into the receive path and signals currently in the receive path out of the receive path.

41. (Cancelled).

42. (previously presented) A method as claimed in claim 39, wherein the receiver arrangement uses a code division multiple access technique.

43. (previously presented) A method according to claim 39, wherein the signals are selected only when such signals contribute to the carrier to noise ratio.

44. (previously added) A method according to claim 39, wherein the plurality of antennas are separated by distance, whereby spatial diversity is employed to differentiate signals.

45. (previously added) A method according to claim 39 wherein the plurality of antennas are arranged to have a different polarization, whereby polarization diversity is employed to differentiate signals.

46. (previously added) A method according to claim 39 wherein the plurality of antennas are arranged to support both spatial and polarization diversity.

47. (previously added) A method according to claim 39, wherein hysteresis is employed to control the switching.

DI 48. (previously presented) A method according to claim 39, wherein the receiver further comprises a rake receiver arranged to combine signals.

49. (previously presented) A method according to claim 39, wherein the receive paths comprise at least two diverse receive paths and wherein each receive path except for one has a delay element operable to delay the signals with respect to each other by a period  $\tau$ , corresponding to the chip rate of a spread spectrum transmission scheme in accordance with which said signals are provided.

50. (previously presented) A method according to claim 49 further comprising the step of:

demodulating said combined signal using MLSE techniques.

51. (previously presented) A method according to claim 39, wherein the predetermined metric comprises a multi-path metric.

52. (previously presented) A wireless access subscriber equipment including a receiver arrangement as described in claim 23.

53. (previously presented) A receiver arrangement according to claim 23 wherein the receiver arrangement is a fixed wireless subscriber terminal.

54. (previously presented) A receiver arrangement according to claim 23, wherein the receiver arrangement is a mobile wireless subscriber terminal.

D1 55. (previously presented) A receiver arrangement according to claim 23, wherein the combiner, the plurality of switches and controller are arranged to perform switching of received diversity signals at predetermined time intervals which are equivalent to a fraction of a frame of said received diversity signals.

56. (previously presented) A method according to claim 39, wherein the predetermined metric is a received signal quality metric.

---